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GOVERNING OF OUTPUT UTILIZATION IN BULGARIAN FARMS

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「ブルガリアにおける農産物の用途別仕向け・取引状況とその規定要因」

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本稿の目的は、ブルガリアにおける農産物の主要な用途別仕向け状況とその規定要因を明らかにすることである。新制度経済学および取引費用経済学の分析枠組みで、異なる形態や規模の農場において、各々の用途別取引状況の相対的な効率性を検討する。

ブルガリア農業においては、資産査定複雑さや取引頻度の低さに加えて、制度面、経済面あるいは農民の行動面での不確実性の為に、その市場形成が妨げられてきた。農業資材供給や農産物取引を促進するのに市場は失敗してきた。しかし、農民や農業組織はこの取引上の困難を克服するために種々の私的な用途別仕向け・取引を模索し展開してきた。農場内生産・加工、個人的接触、長期出荷契約および連結取引方式などの多様な形態が生じており、今日における農産物仕向け・取引の構造を特徴づけている。

多様な形態や規模の農産物仕向け・取引を類型化し、その相対的なシェアを検討する。生産物の種別と仕向け・取引組織の選択との関係を明確にし、仕向け・取引形態の選択に対するミクロ経済的要因を議論する。農産物の仕向け・取引に関して、特定の買い手あるいは方式を選ぶ際に、それを規定する重要な要因を検討する。

主要な農産物および農場形態に対して、用途別仕向け・取引に関する種々の問題のうちで顕著なものを特定化し、さらに、仕向け・取引を成功させる際に重要な要因について検討する。

一般に契約の遂行費用が高いことに伴う市場取引コストが高いこと、信用供給コストが莫大であることが、ブルガリア農業の拡大を制約している主要な要因である。将来的に農業発展のための最も重要な要因は制度的環境の改善と農業経営における自己および家族員の経験であることを指摘する。

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Introduction

Utilization of farm outputs is one of the most critical problems for managers of commercial farms. There has been a huge body of publications on agrarian marketing underlying the importance of the problem. What has been a new development in recent years is the incorporation of the *New Institutional and Transaction Costs Economics* framework into analysis of various governing modes for organization of output utilization - agrarian markets, specific marketing contracts, marketing cooperatives and other private organizations, variety of forms for vertical integration (Fahlbeck; Sporleder).

According to this new approach, the choice of one or another form for governing of output utilization will depend on: *institutional environment* - existence of real private property rights on

agrarian resources, rights of contracting, efficient system for enforcement of individual rights and contracts, other formal and informal restrictions; and on *level of transaction costs* of available (and practically possible) alternative modes for organization of outputs utilization (Bachev and Tsuji a; Williamson). Agrarian agents will govern outputs utilization transactions though most economical (transacting costs minimizing) way - using free market, special contracts mode, collective utilization form, or internal organization etc.

Following this “new logic” dominating form for utilization of farm products will depend on *comparative advantages* to other feasible modes for *marketing* (spot light sell, long-term marketing contract, collective marketing etc.) and *farm enlargement* (e.g. internal consumption and/or processing). Farm managers will extend *horizontal boundaries* of farms through land, labor, inputs supply contracts, and/or cooperation (merger) until the point where the effective farm enlargement is restricted by high level of (transacting) costs for outside marketing of farm outputs. High marketing costs would restrict outside trade but would not stop further expansion of *vertical boundaries* of farms. Farm would continue to extend through some effective form of vertical integration (in-farm production consumption, internal processing, retail trade etc.) until any transaction (additional benefits, costs minimizing etc.) potential is explored. Ultimately the effective size (economic boundaries) of farm will be determined by the total costs for governing of marketing, land supply, labor supply, input supply and finance supply etc (Bachev and Tsuji a). Relative level of transacting costs will depend on: *behavioral characteristics* of agrarian agents (such as bounded rationality, tendency for opportunism, trust, reputation consideration), and on critical dimensions of each transaction (appropriability, asset specificity, uncertainty, and frequency).

In this paper a first attempt is made to identify dominant forms and factors for outputs utilization in Bulgarian farms. The study is based on 2001 data collected through interviews with managers of 194 “typical” farms of different type and size in all major regions. The survey covers around 0.5% of commercial farms in the country¹. More than 38% of surveyed farms are unregistered “individual, family, or group farm”, almost 29% are “cooperatives”, and one-third has a status of “firm”. More than 45% of questioned farms self-determined themselves as “middle sized”, a little bit more than 38% as “small”, and 16.5% are “large” farms.

Modes for utilization of farm outputs

Majority of Bulgarian farms markets their output through some form of *sell out deals*. The share of output governed by this mode of utilization accounts for a significant part of total output in surveyed farms (Table 1). Most of farm produces have “mass” standardized character and therefore *free market prices* or *standard sell contract* (spot market or wholesale market deals, classical contracts) govern effectively relationships with buying partners.

¹ According to the Ministry of Agriculture and Forestry there are about 42000 “market oriented farms” in Bulgaria (2000 data). Most of them are unregistered farms (99.3%) cultivating 19.7% of total agricultural land. Registered 3125 cooperatives and 2275 agro-firms manage accordingly 61.6% and 18.7% of agricultural land.

Table 1 Directions for utilization of farm outputs in Bulgarian farms (percent)

Type of farm	Share of farms using output for:					Share of total output for:				
	Household consumption	in-farm consumption	in-farm processing	long-term contract for outside processing	sell	Household consumption	in-farm consumption	in-farm processing	long-term contract for outside processing	sell
Unregistered	81.08	40.54	21.62	5.41	100.00	18.57	18.00	16.25	10.00	73.59
Cooperative	46.43	64.29	14.29	3.57	100.00	12.46	24.00	19.50	40.00	74.93
Firm	43.75	56.25	40.63	6.25	78.13	20.79	26.11	38.08	10.00	76.96
Small-size	86.49	45.95	16.22	0.00	100.00	20.09	18.53	18.33	0.00	71.14
Middle-size	40.91	40.91	31.82	4.55	93.18	16.78	34.00	25.93	10.00	75.68
Large	43.75	43.75	31.25	18.75	75.00	9.29	35.00	46.00	20.00	84.17
Total	58.76	43.30	25.77	5.15	92.78	17.72	27.90	28.12	16.00	74.94

Source: personal interviews

Insignificant number of all commercial farms manage their output utilization through a special *long-term contract for outside processing* (Table 1). However, the portion of output utilization under such special mode of marketing reaches a good part of the overall output in respective farms. This form of governing is most common for large farms, and share of marketed outputs via this mode is particularly high for big and cooperative farms. Necessity for a special contract form for governing of a long-term relations with processing industries is caused by a high frequencies of transactions between same partners, big transacting uncertainty (price, behavioral), and existence of some form of asset dependency with downstream partners. High mutual (capacity, time of delivery, quality specifications) or unilateral dependency (negotiation power, monopoly situation) is often responsible for preference to a special private mode for carrying out of farm marketing (Bachev and Tsuji b). Simple transacting across “free” market would create serious transacting difficulties and could restrict or entirely block sells transactions. Therefore, instead of unreliable (and expensive) spot or classical contract, a long-term marketing (procurement) contract is used to overcome transacting problems and to minimize costs of utilization.

When dependency of farm assets from an outside buyer or seller is very big, and uncertainty and frequency of transacting is high, then no market or contract form could effectively protect farm specific investment. Internal (in-farm, ownership) integration and direct control is the most effective mean to govern such dependant transactions. Here possibility to realize economy of scale (or scope) are effectively explored within farm boundaries, and instead of (off-farm) marketing *in-farm production consumption* (diversification into inputs supply) or *in-farm processing* (diversification into processing activity) take place. Number of Bulgarian farms which entirely integrate “output utilization” (within farm boundaries) is great as share of output governed in this way reaches a significant part of overall output utilization transactions (Table 1). Our survey also proves that, contrary to traditional “logic” of benefits from (one product) specialization, almost *all livestock farms* (merely one-fifth of small and unregistered farms are exceptions) integrate the *forage production* as well. This is one entirely different (namely crop production) activity and benefits from internal (ownership) organization comes not from productivity (production costs advantages) but from the huge transaction cost minimization or saving (overcoming of big uncertainty and risk associated with critical livestock

operations market and/or outside forage supply).

Vertical integration is an effective *alternative way for optimization of farm size* to horizontal (one or more products) enlargement of farm boundaries. When it is too costly to trade on open (free) market for inputs procurements or marketing of farm outputs (big uncertainty, high unilateral dependency and possibility for opportunistic behavior, missing markets situation etc.) then *internal organization* (in-farm production, in-farm processing etc.) is an effective managerial response to market and/or contract “failures”. In-farm integration of transactions would be undertaken only if there is a significant transacting costs economizing potential comparing to off-farm trade. However, internal organization of new and not-specialized activities (diversification into new production, processing, retailing etc.) would inevitably be associated with increase on internal transaction and/or production costs. Therefore, limits of farm expansion through vertical mode would be eventually determined by *trade-off* between production and transacting costs savings (Bachev and Tsuji a). Otherwise farms either would not be able to protect effectively their specific (dependant) investments (e.g. in case of one product specialization) and therefore face high outside transacting costs; or they have to make ineffective investments in unrelated activities (e.g. diversification of products, processing etc.) and thus face high internal transaction costs and/or lose on production cost competition. If vertical integration is connected with prohibitively high (transacting and production) costs then internal organization would also fail, and transactions would not be carried out at “effective” scale or be blocked at all (“small” farms, backward technology development, unsustainable structures etc.).

“Own consumption” or “giving to relatives and friends” has been traditionally a basic mode for utilization of output which is still dominating in majority of commercial farms (Table 1). This form of “direct marketing” is associated with low (zero) costs (no searching costs, easy planning of demand, facile exchange), and a number of extra benefits such as non-profit activity, full information about technology and origin of produce, interlinking with other activities etc. (Bachev)

Finally, a good part of surveyed farms take part in service providing transactions. This form of *marketing of farm services* (instead of farm outputs) is more common for registered (43% of cooperatives, 62% of firms), and middle-size and large farms (45% and 69% accordingly). Agrarian services occupy around 13% of the product of service supply farms. Thus involvement in this kind of transactions is associated with utilization of free equipment and labor rather than with investment in specific assets for organization of agrarian services. In these instances, it is equally unprofitable (high transacting costs) to carry out both trading of temporally free resources (leasing out of equipment and machinery; selling out labor) and further specialization in services (service trading).

Product specificity

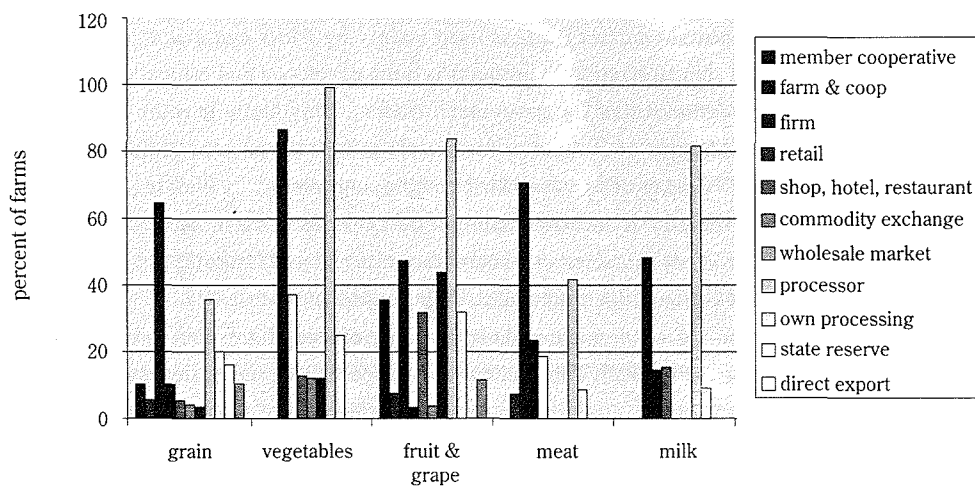
Dominant modes for governing of output utilization transactions are quite specific for different farm products.

Some *market agent* (mainly firms, and to the less extent farms or cooperatives) is broadly used for marketing of all products (Figure 1). This form is more often used for utilization of *vegetables, grains*, and meat from all type of crop and livestock farms. Here standardization of products and technologies is higher, and thus market (prices, quality standards, competition) governs effectively relations with downstream partners. There is no need to develop or use any special (private) form to carry out transacting, and the classical trade (across market) with a specialized market agent (middle man)

dominates.

When specificity of farm products to a particular buyer (e.g. processor) increases then direct marketing contracts with respective partners are commonly used to govern transactions. *Firm-processor* is the major buyer for *vegetables, fruits and grape*, and *milk* for all kind of farms (Figure 1). Since *product specification* (special technology, special origin, special time of delivery, freshness) is important for a particular buyer, and strong *site-specificity* is in place (single buyer in the region, big capacity dependency), and frequency of transacting with a particular partner is high. Facilitating of vertical links through direct and tight-up contracts is important for both sides. Marketing relations are usually coupled with development of specific capital for trade with the particular partner (modes for planning of production and deliveries, controlling qualities, dispute resolutions, interlinking marketing with finance and/or inputs supply etc.). Such *quasi integrating* modes intensify and harmonize relationships, and minimize overall transaction costs for processor and farms alike. This form of tight-up marketing with a firm-processor is also practiced by a half of middle-size livestock farms for meat utilization, and by three-fourth of large crop farms for *grain* sells.

Figure 1 Modes for utilization and destination of farm outputs



Source: personal interviews

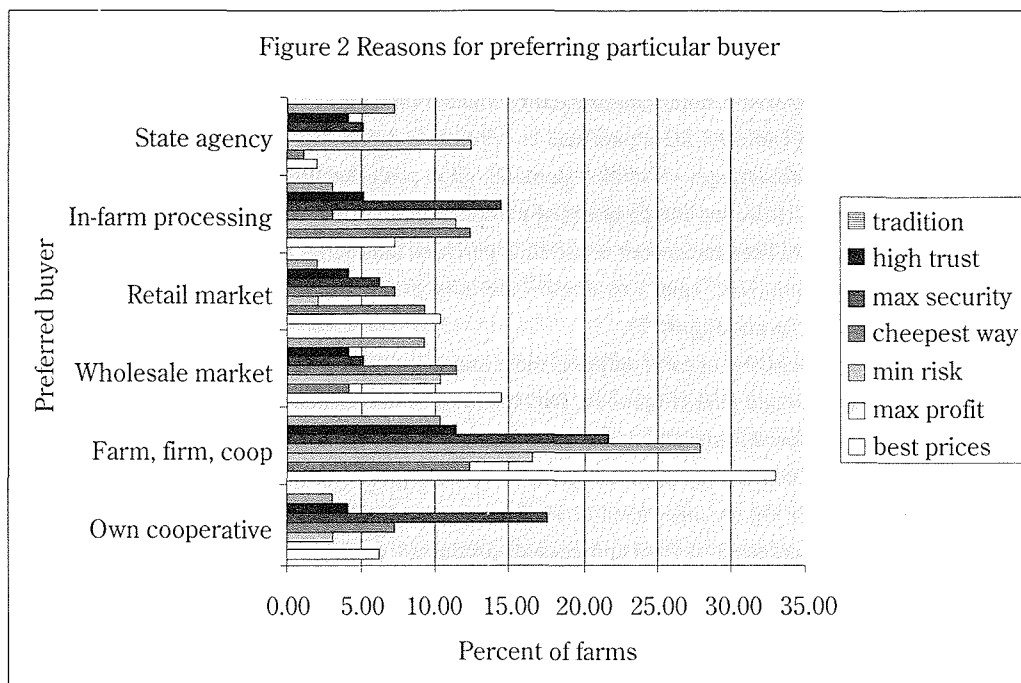
Similar closely coordinated contracts for *wholesale marketing to shops, hotels, and restaurants* are also often applied when control on freshness, origin, quality etc. of farm products is especially important - mainly *fruits and grape*, and *meat*; and to lesser extent *milk and vegetables* (Figure 1). This mode of utilization is particularly widespread in management of relations of large agro-firm meat producers and such wholesale buyers - accordingly for two-third of big farms and more than one-third of surveyed firms.

Direct export is carried out by one tenth of *grain*, and *fruit and grape* producers (Figure 1). As far as grain is concerned those are mainly unregistered farms and firms of all sizes, while for fresh fruits and grape those are exclusively middle-size firms. This form permits to realize full benefits from trading at international markets when profit margin is quite significant (wheat, sunflower, fruits and grapes with special origin and quality). This form is practiced by relatively larger farms which could make and return-back investment in specialized capital for such trade (e.g. experience, market information, personal ties, special origin and quality of products etc.).

"*Best prices*", "*low costs*", and "*maximum security*" are main reasons for preferring the form of marketing to "another farmer, cooperative or firm" by all type of farms (Figure 2). Besides, the majority of farms (37%) report they have "many buyers", and therefore faceless (rather than personal) relations dominate and *market* mediate effectively transactions between agents. However, *frequency of deals* with "the same partner" for a large share of farms is high: 37% "mainly" or "always" sell to the same agent, and only 2% of farms change the buyer every time (season). Big repetitions of relations between same agents restrict information asymmetry between partners and their opportunistic behavior, develop mutual trust and other mechanisms for facilitating transactions (modes of payments, guarantees, dispute resolution devices), and diminish overall transacting costs. That is why for larger operators (middle-size and big registered farms) the constant trade with the single buyer is the main mode for organization of marketing deals.

Traditional form of *wholesale market trade* is used mainly by *fruits and grape*, and *vegetables* producers (Figure 1). Here standardization of products is quite developed and critical quality margins are easily (with low costs) controlled by anonymous traders. This mode is more significant for middle-size firms while majority of Bulgarian farms still more rely on other effective ways for marketing of their outputs. Number of surveyed farms employing *commodity exchange* for marketing of output is even smaller (Table 1). It concerns mainly some *vegetables*, *fruits*, and *grains* which have commodity (highly standardized) character and where trade (current and future) is not associated with great transacting (fees, measurement, enforcement, disputing etc.) expenses.

Main motives for selection of *wholesale market* by majority of using farms are "*best prices*", "*low costs*", and "*minimum risk*" (Figure 2). This mode is most important for unregistered and cooperative middle-sized farms. For all farms, applying wholesaling repetition of marketing on a particular market is rare (change place every time). It means that accessible (regional) *wholesale markets* do not give equal opportunities and farmers have to select (change) particular market according to their profit expectation (in terms of demand, price level, transportation costs etc) in each time, place and occasion.



Source: personal interviews

Direct *retail marketing* to final consumers is also practiced by some farms, and it is chiefly important for *vegetables* (Figure 1). Here freshness, appearance, origin, production technology (e.g. organic farming) of delivered products is extremely important for consumers. Despite "superior" sell costs (related to smaller amounts of deals) this form allows to realize "full" (retail) benefits of marketing and to get higher pay-off on investments in special capital - special varieties, origin, and quality of farm products; developed personal (client) relationships with buyers etc. Surveyed farms notify that "best prices", "maximum profit" and "low costs" are chief reasons for preferences to retail form of marketing (Figure 2). Understandably majority of practicing farms trade with many buyers. However, for around 10% of all but large farms client relationships also takes place and they have always the same buyer.

Member (own) cooperative is used only for a part of *fruits and grape*, and *grain* utilization (Figure 1). Collective mode of marketing (marketing or general purpose coop) is associated with a number of transacting benefits unachievable by individual farms - economy of scale and scope of marketing activities (search, promotion, operational etc. costs savings), better negotiating positions, interlinking of transactions (with storing, transportation, retails etc.). That is why this form is common only for all type of non-large farms. "Maximum security", "low costs" and "best prices" are identified as major factors for using the own cooperative for marketing (Figure 2). Intensity of selling transaction through this mode is high and all applying farms "always" or "mainly" use the same cooperative for marketing of their outputs. However, despite the great potential for governing of transactions (non-for-profit member owned organization) this mode is not widely used by Bulgarian farms. Currently only a small fraction of surveyed farms (little more than 4%) are member of marketing cooperatives. Development and maintenance costs of cooperative organization are

quite high in transitional conditions and majority of farms prefer to use other (relatively more effective) market and private modes for governing their relations with other agents.

Selling out to *state reserve* is important marketing channel for a good number of registered and non-small *grain* producers (Table 1). State purchase is “preferred mode” for large farms since it gives a number of transacting advantages - “stable” demand, good price, secure payments, low negotiation and enforcement costs. However, total amount of marketed grain through this mode is relatively low. In recent years there have been incidences to use state purchase (and sells) as a mean to stabilize market prices as well. “*Minimum risk*” and “*tradition*” are most common factors for preferring the state agency as a partner by farms (Figure 2).

Intra-farm (own) processing of farm output is most important for utilization of *fruits and grape*, and to lesser extent for *meat* and *milk* (Figure 1). This mode of “internal marketing” is mainly practiced by middle-size unregistered farms and agro-firms. Namely larger operational size and high frequency of transacting give an economic opportunity for internal exploration of inter-dependant assets (in farming and processing). On the other hand *vertical integration* tends to protect dependant investments and to pay-off from marketing of final (processed) products - getting full profit (on farm and food products), trade with special brand names, lessen market dependency (easy storage and transportation) etc. Not surprisingly the most often cited reasons for intra-farm utilization of farming products are “*maximum security*”, “*maximum profit*” and “*minimum risk*” (Figure 2).

Interlinked organization

Interlinked organization of inputs supply with marketing of farm output gives an opportunity to minimize overall costs for governing of those two groups of transacting (a single contract for input supply and marketing). In many cases this mode extends *vertical coordination* (quasi integration) of farms with the supplier of a particular input. For instance, suppliers of super elite seeds also *supply* farms with high quality inputs and *contract* mass production of seeds with these farms. In other instances, *dependant buyers of farm produce* (e.g. milk processor) *organize supply of a critical input* (e.g. forage) in order to secure the high quality and quantity of interlinked milk procurement. Usually the integrator is a big agent who can effectively govern those *multi-types transactions* (economy of scale and scope or in management of subcontracts). Majority of interviewed farms report “*there is no such links*” with supply of *machines and equipment*, and *buildings* (95% and 89% respectively) while share of farms without such relations between supply of *other material inputs* and marketing is lower (between 44%-62%).

In a good part of cases supplier also “*purchase farm output*”. To the greatest extent interlinked organization of supply and marketing is with the suppliers of *seeds, chemicals, forage, and animals*. This mode of “reciprocal supply” is used by a significant part of firms and middle size farms in relations with chemical suppliers (32% and 33% accordingly) and forage (52% and 30% respectively); by cooperatives, agro-firms and large farms for seed supply (41%, 44% and 50% correspondingly); and unregistered and small farms for relations with suppliers of animals (40% and 44% accordingly). All these figures demonstrates the emerging or existing *vertical integration* of farming which is carried out through tight contracts for marketing and inputs supply. As a rule the integrator is a large farmer, trader or processor (seeds and animal dealers, milk or meat processors). They “secure” inputs supply of needed farm products and row materials (in particular *periods, quantities, qualities,*

origins) through interlinking inputs furnished farms.

In some instances, the outside integrator owns technological know-how or exclusive rights on agrarian products (variety of seeds, fodders of animals etc.) and contracts mass production with respective farms. In these cases he is the exclusive supplier of farms with these assets (produced or distributed by the integrator). In other instances, the integrator "organizes" supply of critical farming inputs (e.g. forage) in order to guarantee the quality of needed farm products (e.g. row milk). In most cases he is a large trader and his involvement in such "supplementing (servicing farmers) business" is not connected with big problem (possibility to explore economy of scale and scope; good negotiating positions for outside procurement etc.). On the other hand, this mode is preferred by farms since it allows to economize on transacting costs for supply and marketing of major products.

In a good portion of farms, "*supplier assists sells*" and this is particularly true for part of firms (40%) and all large farms for supply of animals; for significant share of small and unregistered farms for seeds supply (35% and 50% accordingly); for a part of middle-size and cooperative farms for chemical supply (35% and 34% correspondingly); and for one third of big farms for forage supply. These "free of charge mediation" in organization of marketing transactions (interlinking supply with a new service) makes a particular supplier preferred among competitors. It secures him a stable (or increasing) demand of material inputs from a particular farms. On the other hand, involvement of a supplier in this additional activity is not associated with significant costs since it is often in the same (as in animals and seeds) or closely related (e.g. forage) businesses. For farms, this "trilateral" organization also is beneficial since it minimizes costs of marketing of final output and restricts market uncertainty

Transacting problems

For majority of Bulgarian farms (including all unregistered and small farms) there is an *alternative* buyer and they are in a position to chose the most effective way for (and thus to *govern*) marketing of their outputs. Only 5% of surveyed farms report they have a single buyer, and therefore face a unilateral dependency (monopoly) situation. The most commercialized farms confront to the greatest extent with "missing" market situation - more than 12% of largest farms, more than 9% of agro-firms, around 7% of middle-size and cooperative farms correspondingly.

Lack of markets is particularly vital for *vegetable* producers where according to one-fourth of them (exclusively middle-sized firms) there are *no buyers* of output at all (Table 2). Missing market situation is also faced by a good part of *grain* producers which accounts for as much as 12% of large and cooperative farms. Apparently a significant number of commercial vegetable and grain farms "overproduce" or can not meet "market demand" (quality and packing requirements, acceptable prices etc.) for their products. In addition, for a significant number of farms "*there is no information for buyer*" which makes marketing of vegetables and grain difficult (Table 2).

Table 2 Main problems for utilization of farm output in Bulgarian farms (percent of farms)

Problems	Farm outputs					
	grain	vegetables	fruits & grape	meat	milk	Others
No buyers	6.98	25.00	0.00	5.26	3.03	2.06
Low prices	54.65	62.50	80.00	78.95	100.00	6.19
Unstable prices	56.98	100.00	64.00	52.63	57.58	8.25
No price information	22.09	0.00	24.00	5.26	15.15	2.06
No buyer information	26.74	62.50	12.00	18.42	15.15	6.19
Buyer better informed	22.09	0.00	36.00	31.58	18.18	2.06
Unreliable buyer	47.67	62.50	92.00	42.11	72.73	4.12
Breach of contracts	18.60	50.00	80.00	21.05	21.21	0.00
Controlling contracts	6.98	50.00	12.00	10.53	18.18	2.06
Non business factors	8.14	0.00	24.00	7.89	0.00	0.00
Other	9.30	25.00	16.00	15.79	18.18	2.06

Source: personal interviews

"Low prices" and "unstable prices" are the main problems for utilization of *all sort* of farm produce in *all type* of surveyed farms (Table 2). It proves that majority of Bulgarian farms are still not able to react effectively to market competition and (seasonal) fluctuation of market prices. Besides, "lack of price information" is an important factor obstructing marketing of grain, and fruits and vegetables. Asymmetry of information in all but vegetables markets is quite significant and a good portion of farms feel that "buyer is better informed" and this impedes marketing of farm products (Table 2). It shows that despite enormous development of public agro-market information in recent years for a big share of farms, this system is still not accessible or too expensive to use.

As far as major *factors for successful utilization* are concerned for *all farm outputs* the most important for farms are "beneficial prices" and "mutual benefits for partners" (Table 3). On the other hand only negligible number of farms consider outside intervention ("third party support") as crucial for marketing deals. Also a minor share of farms (fruits and grape producers being exception) regard "lack of competition" as critical for effective organization of their marketing transactions. All these prove that for majority of Bulgarian farms, expectations for well working markets (and thus for fair unassisted exchange) is the most important factors for utilization of farm produces.

"Unreliability of the buyer" is among the chief factor impeding marketing of surveyed farms (Table 2). With small exceptions (e.g. in vegetables marketing of larger and registered farms) tendency for opportunistic behavior of buyers dominates. Irrelevantly to the type of farms most of them are the vulnerable side having no reliable (personal, private, public) mechanisms to control opportunism of downstream partners. Moreover, for significant number of fruit and grape (especially registered bigger farms), and vegetables producers "breach of contracts" are major problems in marketing deals. Not-fulfillment of contract terms is also very important for a good part of milk and meat producers, particularly for large meat farms, and for small and cooperative milk producers. In addition, for majority of smaller and unregistered farms "enforcement of contract terms" is a serious problem. For vegetables, fruits and grape, meat, and milk it is often very difficult to formulate in a written (contract) form and to dispute negotiated provisions (e.g. quality and quantity variations, time of

delivery, sequential obligations of either partners, etc.). Besides, contract enforcement for *perishable* products through a third party (slow or ineffectively working court system) is quite expensive or impossible at all. That is why some small and inexperienced farms are facing essential problems with marketing contracts and enforcement of contract terms.

Table 3 Main factors for successful marketing of farm output in Bulgarian farms (percent of farms)

Factors	Farm outputs					
	grain	vegetables	fruits & grape	meat	milk	Others
Mutual benefits	51.16	37.50	64.00	28.95	36.36	4.12
Existence of written contract	22.09	37.50	100.00	23.68	42.42	0.00
Oral agreements	10.47	37.50	4.00	34.21	15.15	0.00
Third-party assistance	3.49	0.00	4.00	5.26	0.00	0.00
Good intention of partners	32.56	100.00	64.00	34.21	30.30	4.12
Tradition	10.47	37.50	20.00	18.42	12.12	2.06
Trust	33.72	62.50	48.00	60.53	45.45	6.19
Beneficial for prices	53.49	87.50	52.00	44.74	51.52	4.12
Lack of competition	6.98	25.00	32.00	15.79	15.15	2.06
Others	2.33	25.00	8.00	10.53	3.03	2.06

Source: personal interviews

As far as main factors for successful utilization is concerned “*trust*” and “*good intention of partners*” happen to be important for all type of producers (Table 3). “*Tradition*” also plays bigger role in effective sell for some part of farms. All this means that *informal governing mechanisms* (such as trust, long-term personal relations, self-restriction of opportunism, self-enforcement of contract) are considered as extremely important for successful organization of marketing deals of Bulgarian farms. Besides, “*existence of written contracts*” is a critical factor for marketing of vegetables, fruit and grape, and milk while “*oral agreements*” are important for vegetables and meat producers. They confirm that for more “*delicate*” (perishable) farm products contract coordination (price, quality, quantity etc. adjustments) is essential means (and necessity) for effective organization of transacting.

Limits of farm enlargements

Major factor limiting farm extension which is generally identified in literature is enormous costs for enforcement (monitoring, measuring, controlling) of non-family labor contracts². Our survey has found out that for the majority of Bulgarian farms the highest management (transaction) costs are associated with “credit supply”, “marketing” and “contract enforcement”.³ Around 45% of surveyed farms devote “*high efforts and time*” for “*finding markets for utilization of farm outputs*”,

² That is why owner-operated farm is the most common form of farming organization around the world (Hayami and Otsuka, 1993, pp.11).

³ Share of farms with great costs for “finding inputs suppliers”, “contracting”, and “information supply” is moderate (28-32%), while for “finding land suppliers”, “relationships with administration”, “registration regimes”, “finding new workers”, and “dealing with professional organizations” is only 15-22%.

for “relationships with banks and for preparation of projects for crediting” and for “contract enforcement”. Therefore, besides high governing costs for enforcement of labor contracts, other factors restricting farm enlargement of Bulgarian farms are high enforcement costs of contracts in general as well as enormous credit supply and marketing costs (Bachev and Kagatsume).

High costs of marketing is particularly typical for middle-size and large registered farms. Those farms are the most commercialized and their overall efficiency strongly depend on efficiency of organization of marketing transactions. That is why these farms invest to the greater extent in marketing than other farms. However, while the general level of costs for finding best markets in these farms is high, the relative level of transacting costs (per unit of output) is presumably lower than in small farms. Larger operational size allows to explore economy of scale and scope of marketing activity, gives better negotiating and enforcement positions and makes investment effective in specific capital for marketing (e.g. information costs, advertisement, product promotion, development of reputation and brand names, organization for direct trade) etc.

Almost two-third of Bulgarian commercial farms indicates their intention to “*enlarge farm size in future*”, including 91% of firms, 81% of large and 66% of middle-size farms, 59% of unregistered and small farms, and 46% of cooperatives. For majority of surveyed farms “*main factors for development of their farms*” relate to improvement of institutional environment - “guaranteed marketing”, “enforcement of Laws and private contracts”, “macro-economic stability”, “legislation framework” and “access to free markets” (Figure 3). Accumulated specific capital in form of “own and family experience” receives also a high priority⁴.

“*Guaranteed marketing*” and “*access to free markets*” are among the chief factors for farms development, and they have superior importance for large and registered farms. There is bigger need for improving outputs utilization conditions in these farms and for this reason they appreciate more amelioration of marketing opportunities. Beside opening and securing markets for agrarian products improvement of the enforcement system of private contracts and laws is a prerequisite for enlargement of farm operations by majority of farms. On the other hand, only a small portion of surveyed farms (13%) consider “*membership in marketing cooperatives*” as important factor to their farm development. Participation in a collective organization for marketing is more important for larger agro-firms. However, a good share of farms (23%) intend “*to integrate closer with a partner in agribusiness*” and this is true to the bigger extent for middle-size registered farms.

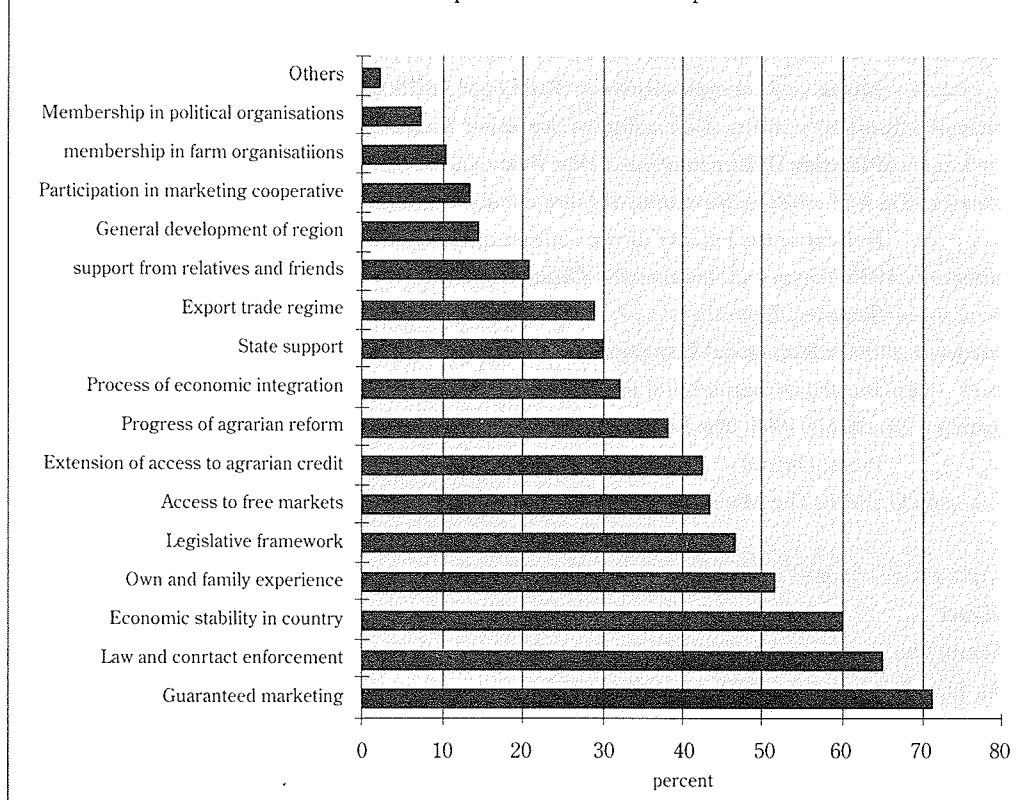
Conclusions

Unlike traditional (Neoclassical) textbook logic postulating that “everybody gets needed inputs, services etc. from free markets”, and “everybody sells produced outputs to free markets”, there have emerged a great variety of specific modes for output utilization in transitional Bulgarian farming. Evolution and factors of all these governance structures could only be understood within *transaction cost minimizing* (comparative institutional analysis) framework.

Big institutional, economic, and behavioral uncertainty combined with high assets specificity

⁴ Managerial skill is the key factor for the success of farms in any institutional and market environment. Out of hundred of thousands “commercial” farms which emerged after 1990 only part survived nowadays. For many agrarian agents have become cheaper to trade (sell, lease-out) available recourses instead of internal organization of land and labor in own farm under poor management.

Figure 3 Share of farms estimating as "high" importance of various factors for their particular farm development



Source: personal interviews

and low recurrence of transactions, have blocked formation of agrarian markets in the country. Market has "failed" to organize significant part of inputs supply and outputs utilization transactions. However, agrarian agents have developed various private modes to overcome transacting difficulties and to govern their dependent transactions. A great variety of internal organizations, personal contacts, long-term marketing contracts, vertical integration and interlinked modes etc. have come to existence and they characterize dominant structures for outputs utilization in Bulgarian farming today.

High marketing costs are among the major factors restricting farm enlargement of Bulgarian farms at present stage along with the big enforcement costs of contracts in general, and enormous credit supply costs. On the other hand, the most important factors for prospective farm development relate to improvement of institutional environment (guaranteed marketing, enforcement of Laws and private contracts, macro-economic stability, legislation framework, access to free markets), and own and family experience in farm management.

References

Bachev H. and M. Kagatsume (2002): Restructuring of Bulgarian Agriculture., In chapter 10,

- Kagatsume et al, Agricultural Restructuring and Environmental Issues in East Europe under the Transition Process, Project Result for the Science Research Grant A(2), pp189-203, (August 2002)
- Bachev H. and M. Kagatsume (2002): Study on Finance Supply in Bulgarian Farms, *The Natural Resource Economics Review*, No 8, pp131-150, Kyoto University, Kyoto
- Bachev H., Tsuji M., 2001a. Governing of Agrarian Transactions. In: *Management and Rural Planning II*, Kyushu University, Fukuoka
- Bachev H., Tsuji M., 2001b. Structures for Organization of Transactions in Bulgarian Agriculture. *Journal of the Faculty of Agriculture of Kyushu University*. 46 (1)
- Fahlbeck E. 1996. *Essays in Transaction Costs Economics*, Swedish University of Agricultural Sciences, Uppsala
- Sporleder, T. (1992): Managerial Economics of Vertically Co-ordinated Agricultural Firms. *American Journal of Agricultural Economics* 74, No 5
- Hayami Y., Otsuka K., 1993. *The Economics of Contract Choice. An Agrarian Perspective*, Carendom Press, Oxford
- Williamson O., 1996. *The Mechanisms of Governance*, Oxford University Press, New York

Abstract

Attempt has been made to identify dominant forms and factors for output utilization in Bulgarian farms. New Institutional and Transaction Costs Economics framework is used to estimate comparative efficiency of various modes for utilization of farm outputs in farms of different type (unregistered, cooperative, agro-firms) and various sizes (small, middle-size, large). Study is based on a large-scale microeconomic data collected through interviews with managers of 0.5% of commercial farms in the country.

Big institutional, economic, and behavioral uncertainty combined with high assets specificity and low recurrence of transactions, have blocked formation of agrarian markets in the country. Market has “failed” to organize significant part of inputs supply and outputs utilization transactions. However, agrarian agents have developed various private modes to overcome transacting difficulties and to govern their dependent transactions. A great variety of in-farm production and processing, personal contacts, long-term marketing contracts, and interlinked modes etc. have come to existence and they characterize dominant structures for outputs utilization in Bulgarian farming today.

Major type of farming outputs utilization (household consumption and giving to friends and relatives; production in-farm consumption; additional processing in-farm; long-term contract for outside processing; sell) in farms of different types and sizes has been identified and their relative share in total farm output has been determined. Product specificity (grain, vegetables, fruits and grape, live animals and meat, milk, others) and its relation to specific organizational choice of outputs utilization (member cooperative; other farm, cooperative or firms; retail trade; wholesale trade to store, hotel, restaurant; commodity exchange; wholesale market; in-farm processing; state reserve; direct export) have been identified and microeconomic factors for governance choice have been discussed. Importance of diverse factors for preferring a particular buyer or mode for utilization of farm outputs (lack of alternative buyer; best prices; maximum profit; minimum risk; cheapest way;

maximum security; high trust; tradition; frequency of transactions with the same partner) have been specified.

Prominence of various transacting problems for utilization (lack of buyers; low prices; unstable prices; no price information; no buyer information; buyer is better informed; unreliable partner; non-fulfillment of negotiated terms; controlling and enforcement of contracts; non-business factors etc.) for main farming products and type of farms have been specified. In the same way the significance of chief factors for successful utilization (mutual benefits for partners; written contract; oral agreement; third-party assistance; good will of partners; tradition; trust; beneficial farm prices; lack of competition) have been identified.

High marketing costs along with the big enforcement costs of contracts in general, and enormous credit supply costs are the major factors restricting farm enlargement of Bulgarian farms at present stage. Besides, the most important factors for farm development in future relate to improvement of institutional environment (guaranteed marketing, enforcement of Laws and private contracts, macro-economic stability, legislation framework, access to free markets), and own and family experience in farm management.

Key words: governing of output utilization and marketing; transaction cost economics; transitional farm organization